

What is Claimed is:

1. A parenteral adjuvant composition  
comprising a detoxified mutant of a bacterial ADP-  
5 ribosylating toxin as the parenteral adjuvant and at  
least one selected antigen.

2. A composition according to claim 1 wherein  
the non-toxic adjuvant is a detoxified mutant selected  
10 from the group consisting of cholera toxin (CT),  
pertussis toxin (PT), and an *E. coli* heat-labile toxin  
(LT).

3. A composition according to claim 2 wherein  
15 the detoxified mutant comprises one or more amino acid  
additions, deletions or substitutions in the A subunit of  
the bacterial holotoxin.

4. A composition according to claim 3 wherein  
20 the detoxified mutant is selected from the group  
consisting of LT-K63, LT-R72, CT-S109, and PT-K9/G129.

5. A composition according to claim 4 wherein  
the detoxified mutant is LT-K63.

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6. A composition according to claim 4 wherein  
the detoxified mutant is LT-R72.

7. A parenteral adjuvant composition  
30 comprising a detoxified mutant of a bacterial ADP-  
ribosylating toxin as the parenteral adjuvant and a  
pharmaceutically acceptable topical vehicle.

8. A composition according to claim 7 wherein  
35 the non-toxic adjuvant is a detoxified mutant selected

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from the group consisting of cholera toxin (CT),  
pertussis toxin (PT), and an *E. coli* heat-labile toxin  
(LT).

5                   9. A composition according to claim 8 wherein  
the detoxified mutant comprises one or more amino acid  
additions, deletions or substitutions in the A subunit of  
the bacterial holotoxin.

10                   10. A composition according to claim 9 wherein  
the detoxified mutant is selected from the group  
consisting of LT-K63, LT-R72, CT-S109, and PT-K9/G129.

15                   11. A composition according to claim 10  
wherein the detoxified mutant is LT-K63.

12. A composition according to claim 10  
wherein the detoxified mutant is LT-R72.

20                   13. The composition of claim 7, further  
comprising at least one selected antigen.

25                   14. A parenteral adjuvant composition  
comprising a detoxified mutant of a bacterial ADP-  
ribosylating toxin as the parenteral adjuvant, a  
pharmaceutically acceptable topical vehicle and at least  
one selected antigen.

30                   15. A method for making a parenteral adjuvant  
composition comprising combining a detoxified mutant of a  
bacterial ADP-ribosylating toxin as the parenteral  
adjuvant with at least one selected antigen.

35                   16. A method according to claim 15, further  
comprising combining a pharmaceutically acceptable

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topical vehicle with the parenteral adjuvant and the antigen.

17. A method of making a parenteral adjuvant  
5 composition comprising combining a detoxified mutant of a bacterial ADP-ribosylating toxin as the parenteral adjuvant with a pharmaceutically acceptable topical vehicle.

10 18. A method according to claim 17, further comprising combining at least one selected antigen with the detoxified mutant of a bacterial ADP-ribosylating toxin and the pharmaceutically acceptable topical vehicle.

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19. A method for immunizing a vertebrate subject comprising parenterally administering to the vertebrate subject an immunologically effective amount of

20 a) an adjuvant comprising a detoxified mutant of a bacterial ADP-ribosylating toxin in combination with a pharmaceutically acceptable vehicle; and

b) at least one selected antigen.

25 20. A method according to claim 19 wherein the non-toxic adjuvant is a detoxified mutant selected from the group consisting of cholera toxin (CT), pertussis toxin (PT), and an *E. coli* heat-labile toxin (LT).

30 21. A method according to claim 20 wherein the detoxified mutant comprises one or more amino acid additions, deletions or substitutions in the A subunit of the bacterial holotoxin.

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sub  
C2

5            23. A method according to claim 22 wherein the  
detoxified mutant is LT-K63.

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15                    26. ~~A~~ method according to claim 19, wherein  
the pharmaceutically acceptable vehicle is a topical  
vehicle.

28. A method according to claim 19, wherein  
the adjuvant is administered to the vertebrate subject  
prior to administering the selected antigen.

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